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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,416	08/31/2000	Kenji Tagawa	2000 1199A	4661

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EXAMINER

QUINONES, EDEL H

ART UNIT

PAPER NUMBER

2131

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7

Please find below and/or attached an Office communication concerning this application or proceeding.

PPL

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/653,416	TAGAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Edel H Quinones	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 31 August 2000.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-13 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)  
 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 3-6.

4)  Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5)  Notice of Informal Patent Application (PTO-152)  
 6)  Other: \_\_\_\_\_.

***III. Detailed Action***

1. Claims 1-13 are presented for examination.

***Information Disclosure Statement***

2. The information disclosure statement filed on 11/28/00 complies with the provisions of MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered as to the merits.
3. The information disclosure statement filed on 9/17/00 complies with the provisions of MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered as to the merits.
4. The information disclosure statement filed on 11/05/02 complies with the provisions of MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered as to the merits.
5. The information disclosure statement filed on 02/26/03 complies with the provisions of MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered as to the merits.

***Priority***

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado et al. (U.S. Patent 6,418,421 and Hurtado hereinafter) in view of Hall et al. (U.S. Patent 5,920,861 and Hall hereinafter).

In regards to claim 1, Hurtado discloses a distribution system (figure 6) including a distribution server (i.e. Content Hosting Site) (figure 6, item 111) for distributing a content (figure 6, item 623) via a network (col. 11, lines 31-35), and first (i.e. Electronic Digital Content Store) (figure 6, item 103) and second (i.e. End User Device) (figure 6, item 609) receiving apparatuses for receiving the content via the network (figure 6, path 601, 608), the distribution system recording a copy of the content onto a recording medium (col. 14, lines 31-39) and supplying the content to a playback apparatus (i.e. End-User Playing Application) (col. 14, lines 21-31),

the first receiving apparatus comprising:

a first receiving unit operable to receive via the network a data set (i.e. Metadata SCs) (col. 20, lines 60-62) including control information controlling copying of the content (i.e. usage conditions) onto the recording medium (col. 12, lines 25-27), and hold the received data set (col. 12, lines 39-46); and

a recording unit (i.e. SC Packer Tool) operable to generate authorization information (i.e. secondary usage conditions) showing whether moving the data set to another receiving apparatus is permitted (i.e. copy authorization) (col. 13, lines 6-9), and record the content onto a distribution medium together with corresponding usage rule information including (1) the authorization information, and (2) the control information included in the data set (col. 21, lines 24-32); and

the second receiving apparatus comprising:

a second receiving unit operable to receive the data set from the distribution server via the network (col. 21, lines 65 through col. 22, line 1), and hold the received data set;

a data set moving unit operable to read authorization information from the distribution medium, and (a) move the data set from the distribution medium to the inside of the second receiving apparatus, and (b) hold the data set, only when the read authorization information shows that moving the data set is permitted (col. 23, lines 23-36); and

a check-out unit operable to perform check-out (i.e. copy to an external portable device) when the data set is held by one of the second receiving unit and the data set moving unit (i.e. the check-out unit and the data set moving unit being integral to the receiving apparatus), check-out performed based on the control information in the held data set by generating a copy of the content included in the held data set and recording the copy onto the recording medium (col. 23, lines 23-36), the copy recorded onto the recording medium being supplied to the playback apparatus.

Hurtado does not disclose that the dataset (i.e. Metadata SC) received at the first receiving device (i.e. Digital Content Store) includes the Content along with the control information controlling copying of the Content (i.e. usage conditions).

Hall discloses a system for defining, creating, and manipulating rights management data structures (col. 1, lines 23-24).

Hall teaches the use of a dataset (i.e. Content Container) (figure 4, item 100) including Content (figure 4, item 3142) along with the control information controlling copying of the Content (i.e. Rules) (figure 4, item 316).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado with the teachings of Hall to include the Content along with the control information controlling copying of the Content in the dataset transmitted to the first receiving unit with the motivation to provide rights management data structure integrity, flexibility, interoperability, user and system transparency, and compatibility (Hall, col. 1, lines 29-31)

In regards to claim 5, Hurtado discloses a distribution system (figure 6) including a distribution server (i.e. Content Hosting Site) (figure 6, item 111) for distributing a content (figure 6, item 113) via a network, a first receiving apparatus (i.e. Electronic Digital Content Store) for receiving the content (i.e. Metadata SCs that correspond to the content) via the network (col. 20, lines 60-62) and recording the content onto a distribution medium (col. 21, lines 24-32), a second receiving apparatus (i.e. End-User Device) (figure 6, item 609) for receiving the content via the distribution medium (col. 21, lines 33-34) (figure 6, path 604) and

recording a copy of the content onto a recording medium (col. 14, lines 31-39), and a playback apparatus (i.e. End-User Player Application) for receiving the copy of the content via the recording medium and playing back the received content (col. 14, lines 21-31);

the distributed content comprising:

a volume area (i.e. Secure Container SC) (col. 10, lines 4-10), in which usage rule information is recorded (col. 12, lines 39-42), the usage rule information including control information controlling copying of the recorded content onto the recording medium (col. 23, lines 23-36), and authorization information (i.e. secondary usage conditions) showing whether moving the control information and the content to the second receiving apparatus is permitted (col. 13, lines 6-9).

Although Hurtado does not explicitly state that a semiconductor memory card is used as a distribution medium in the distribution system, it does state that the SC is transmitted from the Digital Content Store to the End User (col. 21, lines 31-32). Given that transmission of digital content using a recorded distribution medium (such as a memory card) is old and well known in the art, it is reasonable to infer that Hurtado implies the use of recorded distribution media for the distribution of the SC from a Digital Content Store to an End User station.

Hurtado does not disclose that the volume area comprises Content and usage rules.

Hall discloses a system for defining, creating, and manipulating rights management data structures (col. 1, lines 23-24).

Hall teaches the use of a dataset (i.e. Content Container) (figure 4, item 100) including Content (figure 4, item 3142) along with the control information controlling copying of the Content (i.e. Rules) (figure 4, item 316).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado with the teachings of Hall to include that the volume area comprises Content and usage rules with the motivation to provide rights management data structure integrity, flexibility, interoperability, user and system transparency, and compatibility (Hall, col. 1, lines 29-31)

In regards to claims 8, 10 and 12, Hurtado teaches a first receiving apparatus (i.e. Electronic Digital Content Store) (figure 6, item 103) in a distribution system (figure 6), the distribution system including a distribution server (i.e. Content Hosting Site) (figure 6, item 111) for distributing a content (figure 6, item 113) via a network (col. 11, lines 31-35), a first receiving apparatus (i.e. Electronic Digital Content Store) for receiving the content (i.e. Metadata SCs that correspond to the content) via the network (col. 20, lines 60-62) and recording the content onto a distribution medium (col. 21, lines 24-32), a second receiving apparatus (i.e. End User Device) (figure 6, item 609) for receiving the content via the distribution medium (col. 21, lines 33-34) (figure 6, path 604) and recording a copy of the content onto a recording medium (col. 14, lines 31-39), and a playback apparatus (i.e. End-User Player Application) for receiving the copy of the content via the recording medium and playing back the received content (col. 14, lines 21-31), and the first receiving apparatus comprising:

a first receiving unit operable to receive via the network a data set (i.e. Metadata SCs) (col. 20, lines 60-62) including the content and control information controlling copying of the content (i.e. usage conditions) onto the recording medium (col. 12, lines 25-27), and hold the received data set (col. 12, lines 39-46); and

a recording unit (i.e. SC Packer Tool) operable to generate authorization information (i.e. secondary usage conditions) showing whether moving the data set to another receiving apparatus is permitted (i.e. copy authorization) (col. 13, lines 6-9), and record the content onto a distribution medium together with corresponding usage rule information including (1) the authorization information, and (2)the control information included in the data set (col. 21, lines 1-10) (col. 21, lines 24-32).

Although Hurtado does not explicitly state that the content is recorded onto a distribution medium, it does state that the SC is transmitted from the Digital Content Store to the End User (col. 21, lines 31-32). Given that transmission of digital content using a recorded distribution medium is old and well known in the art, it is reasonable to infer that Hurtado implies the use of recorded distribution media for the distribution of the SC from a Digital Content Store to an End User station.

Hurtado does not disclose that the dataset (i.e. Metadata SC) received at the first receiving device (i.e. Digital Content Store) includes the Content along with the control information controlling copying of the Content (i.e. usage conditions).

Hall discloses a system for defining, creating, and manipulating rights management data structures (col. 1, lines 23-24).

Hall teaches the use of a dataset (i.e. Content Container) (figure 4, item 100) including Content (figure 4, item 3142) along with the control information controlling copying of the Content (i.e. Rules) (figure 4, item 316).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado with the teachings of Hall to include the Content

along with the control information controlling copying of the Content in the dataset transmitted to the first receiving unit with the motivation to provide rights management data structure integrity, flexibility, interoperability, user and system transparency, and compatibility (Hall, col. 1, lines 29-31)

In regards to claims 9, 11 and 13, Hurtado discloses a receiving apparatus (i.e. End User Device) (figure 6, item 609) for receiving contents from a distribution server via the network (col. 22, line 1), as well as receiving contents via a distribution medium (col. 21, lines 33-34) (figure 6, path 604), and recording copies of a received content onto a recording medium (col. 14, lines 31-39),

the distribution medium storing contents and corresponding usage rule information (col. 21, lines 1-10) (col. 21, lines 24-32), and

the usage rule information including control information (i.e. usage conditions) controlling copying of a recorded content onto the recording medium (col. 12, lines 25-27), and authorization information (i.e. secondary usage conditions) showing whether moving a data set (i.e. copy authorization) including a paired content and control information to the receiving apparatus is permitted (col. 13, lines 6-9), and

the receiving apparatus comprising:

a receiving unit operable to receive the data set from the distribution server via the network (col. 21, lines 65 through col. 22, line 1), and hold the received data set;

a data set moving unit operable to read authorization information from the distribution medium, and (a) move the data set from the distribution medium to the inside of the second

receiving apparatus (i.e. make a secondary copy), and (b) hold the data set, only when the read authorization information shows that moving the data set is permitted (col. 23, lines 23-36); and a check-out unit operable to perform check-out (i.e. copy to an external portable device) when the data set is held by one of the second receiving unit and the data set moving unit, check-out performed based on the control information in the held dataset by generating a copy of the content included in the held data set and recording the copy onto the recording medium (col. 23, lines 23-36), the copy recorded onto the recording medium being supplied to the playback apparatus.

8. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of Hall as applied to claim 1 above, in further view of Coley et al. (U.S. Patent 5,790,664 and Coley hereinafter) and Bendert et al. (U.S. Patent 5,761,678 and Bendert hereinafter).

In regards to claim 2, the combination of Hurtado and Hall teaches claim 1 as discussed above.

Hurtado also teaches wherein:

the control information indicates a number of remaining check-outs (col. 10, lines 31-33); the check-out unit includes a connecting unit operable to connect to a recording medium, and is operable to record a copy of the content included in the data set held by the data set moving unit onto the recording medium (col. 14, lines 31-39), and the number of remaining check-out shown by the control information held by one of the second receiving unit and the data set moving unit is at least one (col. 10, lines 42-45); and

the second receiving apparatus further comprises:

an updating unit operable to update the control information by decrementing the number of remaining check-outs when a copy of the held content is newly recorded on the recording medium (col. 10, lines 38-42).

The combination of Hurtado and Hall does not teach:

a check-in unit operable to delete, when a copy of the content is already recorded on the connected recording medium, the copy of the content recorded on the connected recording medium; and to increment the number of remaining check-outs when the copy of the held content is deleted from the recording medium.

that the check-out unit is operable to record a copy of the content when a copy of the held content is not already recorded on the connected recording medium,

Coley teaches a system for automated monitoring and management of licensed software (col. 1, lines 6-7).

Coley teaches a check-in unit operable to delete, when a copy of the content is already recorded on the connected recording medium, the copy of the content recorded on the connected recording medium (col. 16, lines 20-38); and to increment the number of remaining check-outs when the copy of the held content is deleted from the recording medium (col. 13, lines 63-64).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado and Hall with the teachings of Coley to include a check-in unit operable to delete, when a copy of the content is already recorded on the connected recording medium, the copy of the content recorded on the connected recording medium; and to increment the number of remaining check-outs when the copy of the held content is deleted from

the recording medium with the motivation to ensure that the use of software (i.e. content) can be tracked (Coley, col. 7, lines 16-17)

Bendert teaches a computer system that minimizes the amount of data that must be copied to support a request to clone a group of objects (col. 1, lines 7-10)

Bendert discloses the use of a check-out unit (i.e. clone manager) operable to record a copy of the content (i.e. metadata for object 102) when a copy of the content is not already recorded on the recording medium (i.e. storage area 100') (col. 9, lines 32-37).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado, Hall and Coley with the teachings of Bendert to include that the check-out unit is operable to record a copy of the content when a copy of the held content is not already recorded on the connected recording medium with the motivation minimize the amount of data and metadata that are copied and hence speed up the system (Bendert, col. 2, lines 40-41)

In regards to claim 3, the combination of Hurtado, Hall, Coley and Bendert teaches the system of claim 2 as discussed above.

Hurtado also teaches wherein:

the check-out unit includes:

an allocation unit operable to allocate a unique identifier (i.e. SC ID) (col. 27, lines 30) to the held content, the unique identifier being recorded onto the recording medium with the content, when check-out is performed; and

Hurtado does not teach:

that the recording medium has an assigned unique identifier;  
that the check-out unit includes a storage unit operable to read the unique identifier for the recording medium connected to the connecting unit from the recording medium, and store the read recording medium identifier as a pair with the allocated content identifier, and

that the check-in unit includes:

a read unit operable to read, when a copy of the content has already been recorded on a recording medium connected to the connecting unit, the unique identifiers for the connected recording medium and the content;

a comparing unit operable to compare the pair of identifiers read by the read unit with the pair of identifiers stored by the storage unit to determine whether the copy recorded on the connected recording medium was previously produced by the second recording apparatus;

a holding unit operable to read, when the copy was previously produced by the second recording apparatus, the copy from the connected recording medium, hold the read copy, and then delete the copy from the recording medium.

Coley teaches:

that the recording medium (i.e. computer containing the client application) has an assigned unique identifier (col. 14, lines 23-24);

that the check-out unit includes a storage unit (i.e. check-out license procedure) operable to read the unique identifier for the recording medium connected to the connecting unit from the recording medium, and store (i.e. generate a client data structure) the read recording medium identifier as a pair with the allocated content identifier (i.e. name of the software application) (col. 14, line 13-27)

that the check-in unit includes:

a read unit operable to read, when a copy of the content has already been recorded on a recording medium connected to the connecting unit, the unique identifiers for the connected recording medium and the content (col. 16, lines 20-26);

a comparing unit operable to compare the pair of identifiers read by the read unit with the pair of identifiers stored by the storage unit to determine whether the copy (i.e. license) recorded on the connected recording medium (i.e. computer) was previously produced by the second recording apparatus (col. 4, lines 30-32);

a holding unit (i.e. check in license procedure) operable to read, when the copy was previously produced by the second recording apparatus, the copy from the connected recording medium, hold the read copy, and then delete the copy from the recording medium (col. 16, lines 26-38).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Hurtado, Hall, Coley and Bendert with the teachings of Coley to include:

that the recording medium has an assigned unique identifier;

that the check-out unit includes a storage unit operable to read the unique identifier for the recording medium connected to the connecting unit from the recording medium, and store the read recording medium identifier as a pair with the allocated content identifier, and

that the check-in unit includes:

a read unit operable to read, when a copy of the content has already been recorded on a recording medium connected to the connecting unit, the unique identifiers for the connected recording medium and the content;

a comparing unit operable to compare the pair of identifiers read by the read unit with the pair of identifiers stored by the storage unit to determine whether the copy recorded on the connected recording medium was previously produced by the second recording apparatus;

a holding unit operable to read, when the copy was previously produced by the second recording apparatus, the copy from the connected recording medium, hold the read copy, and then delete the copy from the recording medium

with the motivation to ensure that the use of software (i.e. content) can be tracked (Coley, col. 7, lines 16-17)

In regards to claim 4, Hurtado discloses wherein, when the authorization information recorded on the distribution medium shows that moving the data set is not permitted, the reading unit is not operable to read the content and the usage rule information, and the playback apparatus plays back the corresponding content directly from the distribution medium, when the authorization information indicates that moving the data set is not permitted (col. 23, lines 43-48). In other words, Hurtado discloses the enforcement of “play allowed/copy not allowed” rules.

9. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtado in view of Hall as applied to claim 5 above, in further view of Shear et al. (Pub. No. 2001/0042043 and Shear hereinafter).

In regards to claim 6, the combination of Hurtado and Hall teaches claim 5 as discussed above.

Hurtado also teaches wherein the content includes encrypted audio data (col. 12, lines 29-34) and a corresponding encryption key used to encrypt the encrypted audio data (col. 12, lines 39-42),

The combination of Hurtado and Hall does not teach that the volume area includes:  
a user data area that stores the encrypted audio data and can be accessed by a device connected to the semiconductor memory card regardless of whether the authenticity of the device has been recognized, and

a protected area that stores the usage rule information and the encryption key and can only be accessed by a device connected to the semiconductor memory card when the authenticity of the device has been recognized.

Shear teaches that the volume area (figure 5, item 100) includes:  
a user data area that stores the encrypted audio data (figure 5, item 200(1)) and can be accessed by a device connected to the semiconductor memory card regardless of whether the authenticity of the device has been recognized, and

a protected area that stores the usage rule information (figure 5, item 204) and the encryption key (figure 5, item 208) and can only be accessed by a device connected to the semiconductor memory card when the authenticity of the device has been recognized (page 11,

par. [0168]) (i.e. in some embodiments, dedicated player 52 may send protected content only to devices authenticated as able to enforce securely rights management rules and usage consequences).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hurtado and Hall with the teachings of Shear to include a user data area that stores the encrypted audio data and can be accessed by a device connected to the semiconductor memory card regardless of whether the authenticity of the device has been recognized, and

a protected area that stores the usage rule information and the encryption key and can only be accessed by a device connected to the semiconductor memory card when the authenticity of the device has been recognized;

with the motivation to use the content provided by the volume in a variety of flexible, secure ways (Shear, page 11, par. [0168]).

In regards to claim 7, Hurtado teaches wherein the authorization information shows that moving the control information and content is permitted by indicating a number of permitted moves (col. 10, lines 31-33) (col. 23, lines 23-36).

***Other Prior Art Made of Record***

10. A. Milstead et al. (U.S. Patent No. 6,345,256) discloses an automated method and apparatus to package digital content for electronic distribution using the identity of the source content;

B. England et al. (U.S. Patent No. 6,330,670) discloses a digital rights management operating system; and

C. Smith, II et al. (U.S. Patent No. 5,884,298) discloses a method for accessing and updating a library of optical discs.

D. Ram et al. (U.S. Patent No. 6,519,700) discloses self protecting documents.

***Conclusion***

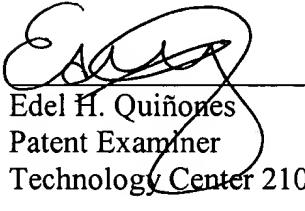
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Points of Contact*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edel H. Quiñones whose telephone number is 703-305-8745. The examiner can normally be reached on M-F (8:00AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Edel H. Quiñones  
Patent Examiner  
Technology Center 2100

March 24, 2004



AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100